

Docket No. 247881US0

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: Koji WADA, et al.

SERIAL NO: New Application

GAU:

FILED: Herewith

EXAMINER:

FOR: ALUMINUM ALLOY MEMBER SUPERIOR IN CORROSION RESISTANCE AND PLASMA RESISTANCE

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

**REFERENCES**

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**RELATED CASES**

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

**CERTIFICATION**

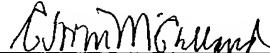
- Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

**DEPOSIT ACCOUNT**

- Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



\_\_\_\_\_  
Norman F. Oblon  
Registration No. 24,618

**C. Irvin McClelland**  
Registration Number 21,124

Customer Number

**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 05/03)

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IN RE APPLICATION OF: Koji WADA, et al.

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FOR: ALUMINUM ALLOY MEMBER SUPERIOR IN CORROSION RESISTANCE AND PLASMA RESISTANCE

**STATEMENT OF RELEVANCY**

**References AA (US 5,069,938) and AB (US 5,494,713) on Form PTO- 1449:**

These references are discussed in the specification.

**Reference AO (JP 5-53870) on Form PTO- 1449:**

This reference is discussed in the specification.

**PURPOSE:** To reduce the weight of an apparatus and to improve the heat conductivity by forming anodic oxide films on a box-shaped Al body and an Al lid for a vacuum chamber and evaporating and removing water by heat treatment.

**CONSTITUTION:** Anodic oxide films are formed on at least the insides of a box-shaped Al body and an Al lid for a vacuum chamber with an oxalic acid solution or the like. The thickness of the films is about  $0.5\text{W}20\mu\text{m}$ . Heat treatment is then carried out at about  $100\text{W}150^\circ\text{C}$  for about  $5\text{W}20\text{hr}$  to evaporate and remove water adsorbed on the anodic oxide films. By this method, a vacuum chamber having satisfactory heat conductivity can simply be manufactured at a low cost. The resistance of the vacuum chamber to corrosion by gases used in CVD and dry etching are comparable to or higher than that of a stainless steel vacuum chamber.

**Reference AP (JP 3-72098) on Form PTO- 1449:**

This reference is discussed in the specification.

**PURPOSE:** To improve corrosion resistance as well as to make an anodically oxidized film flexible, to prevent cracking and to reduce the rate of discharge of gas by forming the film on an Al material contg. a specified amt. of Cu and by carrying out electrolysis under prescribed conditions.

**CONSTITUTION:** An Al alloy consisting of 0.05-4wt.% Cu and the balance Al is refined and worked to obtain an Al material for vacuum having a prescribed shape. This Al material is anodically oxidized in an electrolytic solution containing oxalic acid to form an anodically oxidized film on the surface. The voltage is then suddenly dropped and electrolysis is carried out at 5-50V constant voltage in the electrolytic solution.

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PLASMA RESISTANCE

**STATEMENT OF RELEVANCY**

**Reference AQ (EP 0 648 866) on Form PTO- 1449:**

This reference is discussed in the specification.

| Form PTO 1449<br>(Modified)   |    | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |          | ATTY DOCKET NO.<br>247881US0 |             | SERIAL NO.<br>New Application                                    |                            |
|---|----|--|----------|------------------------------|-------------|--|----------------------------|
| LIST OF REFERENCES CITED BY APPLICANT                                   |    | APPLICANT<br>Koji WADA, et al.                             |          |                              |             |  |                            |
|   |    | FILING DATE<br>Herewith                                    |          | GROUP                        |             |  |                            |
| U.S. PATENT DOCUMENTS   |    |  |          |                              |             |  |                            |
| EXAMINER INITIAL  |    | DOCUMENT NUMBER  | DATE     | NAME                         | CLASS       | SUB CLASS  | FILING DATE IF APPROPRIATE |
|   | AA | 5,069,938  | 12/03/91 | D'Arcy H. LORIMER, et al.    |             |  |                            |
|   | AB | 5,494,713  | 02/27/96 | Hayashi OOTUKI               |             |  |                            |
|   | AC | 2003/0035970   | 02/20/03 | Koji WADA, et al.            |             |  |                            |
|   | AD |  |          |                              |             |  |                            |
|   | AE |  |          |                              |             |  |                            |
|   | AF |  |          |                              |             |  |                            |
|   | AG |  |          |                              |             |  |                            |
|   | AH |  |          |                              |             |  |                            |
|   | AI |  |          |                              |             |  |                            |
|   | AJ |  |          |                              |             |  |                            |
|   | AK |  |          |                              |             |  |                            |
|   | AL |  |          |                              |             |  |                            |
|   | AM |  |          |                              |             |  |                            |
|   | AN |  |          |                              |             |  |                            |
| FOREIGN PATENT DOCUMENTS  |    |  |          |                              |             |  |                            |
|   |    | DOCUMENT NUMBER  | DATE     | COUNTRY                      | TRANSLATION |  |                            |
|   | AO | 5-53870  | 08/11/93 | Japan                        | YES         | NO   | x                          |
|   | AP | 3-72098  | 03/27/91 | Japan                        |             |  | x                          |
|   | AQ | 0 648 866  | 04/19/95 | Europe                       |             |  |                            |
|   | AR |  |          |                              |             |  |                            |
|   | AS |  |          |                              |             |  |                            |
|   | AT |  |          |                              |             |  |                            |
|   | AU |  |          |                              |             |  |                            |
|   | AV |  |          |                              |             |  |                            |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) |    |  |          |                              |             |  |                            |
|   | AW |  |          |                              |             |  |                            |
|   | AX |  |          |                              |             |  |                            |
|   | AY |  |          |                              |             |  |                            |
|   | AZ |  |          |                              |             | <input type="checkbox"/> Additional References sheet(s) attached |                            |
| Examiner  |    |  |          |                              |             | Date Considered  |                            |

\*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.